IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:   09/777,884

Filing Date: February 7, 2001

Applicant: James A. JOHANSON et al.

Group Art Unit: 2155

Examiner: Victor D. Lesniewski

Title: BLUETOOTH DEVICE POSITION DISPLAY

Attorney Docket: 129250-001020/US

Customer Service Window   August 2, 2006
Randolph Building
401 Dulany Street
Alexandria, VA 22314
MAIL STOP APPEAL BRIEF-PATENTS

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

Sir:

In response to the NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF dated July 18, 2006 the Appellants have enclosed a signed original of the Appeal Brief filed on May 5, 2006.
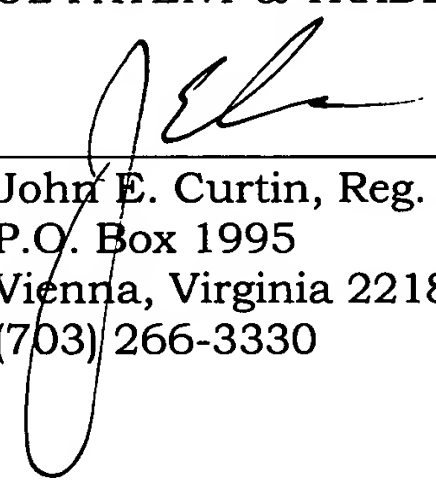
In the event this response does not place the Appeal Brief in compliance with 37 CFR 41.37, Appellants request that the Examiner contact the undersigned at (703) 266-3330.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-3777 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.
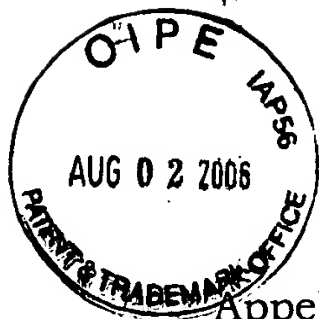
Respectfully submitted,

CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC.

By_____

John E. Curtin, Reg. No. 37,602
P.O. Box 1995
Vienna, Virginia 22183
(703) 266-3330

IN THE U.S. PATENT AND TRADEMARK OFFICE

Appellants: James A JOHANSON et al.

Application No.:   09/777,884

Art Unit: 2152

Filed: February 7, 2001

Examiner: Victor D. Lesniewski

For: BLUETOOTH DEVICE POSITION DISPLAY

Attorney Docket No.:   129250-001020/US

APPLICANT'S BRIEF ON APPEAL

MAIL STOP APPEAL BRIEF - PATENTS
Customer Service Window   May 1, 2006
Randolph Building
401 Dulany Street
Alexandria, VA 22314

TABLE OF CONTENTS Page

APPELLANT'S BRIEF ON APPEAL

I. REAL PARTY IN INTEREST:

The real party in interest in this appeal is Lucent Technologies Inc. Assignment of the application was submitted to the U.S. Patent and Trademark Office on February 7, 2001, and recorded at Reel 011565, Frame 0492.

II. RELATED APPEALS AND INTERFERENCES:

There are no known appeals or interferences that will affect, be directly affected by, or have a bearing on the Board's decision in this Appeal.

III. EVIDENCE SUBMITTED UNDER CFR 1.130, 1.131, OR 1.132:

None.

IV. DECISIONS RENDERED BY THE COURT OR THE BOARD IN RELATED APPEALS AND INTERFERENCES:

None.

V. STATUS OF CLAIMS:

Claims 3-5, 19 and 30-37 are pending in the application, with claims 19 and 32 being written in independent form.

Claims 3-5, 19 and 30-37 remain finally rejected under 35 U.S.C. §103(a). Claims 3-5, 19 and 30-37 are being appealed.

VI. STATUS OF AMENDMENTS:

A Request for Reconsideration ("Request") was filed on February 3, 2006. In an Advisory Action dated February 24, 2006, the Examiner stated that the Request was considered and Appellant's amendments entered; however, the Request did not place the application in condition for allowance.

VII.   SUMMARY OF CLAIMED SUBJECT MATTER:

(i)   Overview of the Subject Matter of the Independent Claims.

The present invention mitigates the problems associated with the prior art and provides unique methods and systems for communicating with nearby wireless electronic devices. For example, one method comprises the steps of: transmitting a first Bluetooth signal; detecting a plurality of second Bluetooth signals, each containing GPS coordinates of at least one nearby device; and then selecting a nearby device associated with one of the detected signals to communicate with based on the received GPS coordinates.

In accordance with embodiments of the present invention, electronic devices such as, for example, computers, laptops, cellular telephones, televisions, VCRs, stereos, pagers, etc. are provided with, or may already have, transceivers. When a user activates the input of a wireless device, a transceiver transmits a low power radio signal requesting GPS coordinates of each electronic device within range of the transceiver. Each device that is within range to receive the signal responds with a signal of its own containing its GPS coordinates. Once the user device receives the GPS coordinates from each electronic device, it displays each device in its respective location. Once the display is shown to the user, the user can select a device based on its location. After the device is selected, communications software that is either incorporated into the present invention or is operated independently can communicate between the user's device and the selected device.

Thus, for example, the present invention allows a user at a meeting to select a laptop to transmit a message to based on the location of the laptop relative to the user. The present invention may also allow a user to

communicate with someone in a car near the user while on the road. The present invention also allows a user to transmit a message to someone's cell phone just by knowing where that person is relative to the user. (See specification, pp. 2-3)

(ii) Additional Text from the Specification in Support of the Claims.

FIG. 1 (Appendix B) illustrates in block diagram form an electronic device according to an embodiment of the present invention. In accordance with the present invention, a first electronic device 10 communicates with all nearby electronic devices to obtain the GPS location of each device. The first electronic device 10 then displays where each other electronic device is in relation to the first electronic device 10 so the user can select an electronic device to communicate with.

A user electronic device 10, such as, for example, a computer, a laptop, a cellular telephone, a PDA, etc., is provided with a transceiver 12. The transceiver 12 is connected to a controller, for example, a microprocessor 13, and is provided with an antenna 11 for broadcasting and receiving radio signals. The electronic device 10 is also provided with a user input device 15 for selecting which other electronic device to communicate with. The input device 15 may be a keyboard, mouse, keypad, touch screen, etc. The electronic device 10 is also provided with an information storage device and a GPS receiver.

Other electronic devices 20, such as, for example, computers, laptops, printers, scanners, cellular telephones, PDAs, automobiles, pagers, etc., likewise have transceivers 22. The transceiver 22 is connected to a controller,

for example, a microprocessor 23, and is provided with an antenna 21 for broadcasting and receiving radio signals. The other electronic devices 20 are also provided with GPS receivers 24. (See specification, pp. 4-5)

In accordance with an exemplary embodiment of the present invention, other electronic devices 20 which can communicate with electronic device 10, such as, for example, computers, laptops, cellular telephones, televisions, VCRs, stereos, pagers, etc. are all provided with transceivers and GPS receivers. The manner in which electronic devices operate will now be described with reference to FIGS. 1, 2 and 3. The microprocessor 13 of electronic device 10 controls operations at electronic device 10, as shown in FIG. 2 (Appendix C), it checks if the input device 15 is activated at processing segment 30. If the input device is not activated as detected at processing segment 30, the microprocessor 13 returns to a start state.

If the input device is activated as detected at processing segment 30, the microprocessor 13 transmits a signal requesting the GPS location and device type (e.g. cellular telephone, computer, printer, PDA, etc.) information of all nearby electronic devices at segment 31. The microprocessor 13 then checks if any response signals are received at processing segment 32. If a response signal is received at processing segment 32, the microprocessor stores the GPS location and device type information contained in the response signal in the information storage device 16 in association with identification information for the responding device. The microprocessor 13 then returns to processing segment 32 to check if another response signal is received. (See specification, pp. 5-6)

When no more response signals are received as detected at processing segment 32, the microprocessor 13 queries the GPS receiver 17 at segment 34

- 4 -

and determines the location of each electronic device 20 that responded relative to the location of electronic device 10 at segment 35. The microprocessor 13 then illustrates each other electronic device 20 as an icon corresponding to the device type of each other electronic device 20 on the display 14 arranged according to their relative locations and altitudes to electronic device 10 at segment 36. If the area displayed is too large, the user can set the maximum distance that an electronic device 20 can be from the user and still be displayed. At this point, the user can select an electronic device 20 to communicate with at processing segment 37, by, for example, keyboard, mouse, touch pad input, touch screen, etc. If the user selects a device to communicate with at processing segment 37, the microprocessor 13 begins a communication routine with the selected device and returns to processing segment 37 so that the user can select another electronic device 20.

If the user does not select a device to communicate with as detected at processing segment 37, the microprocessor 13 checks if the user de-activated the user interface at processing segment 38. If the user input device 15 was not deactivated as detected at processing segment 38, the microprocessor 13 returns to processing segment 31 to transmit a GPS coordinate and device type request signal again so that any additional devices within range can be displayed and the positions of the devices already displayed can be updated. If input device 15 was deactivated at processing segment 38, the microprocessor 13 returns to a start state. (See specification, pp. 6-7)

FIG. 3 (Appendix D) illustrates in flowchart form the processing performed by nearby electronic devices 20. If a GPS location request signal is not received at processing segment 50, the microprocessor 23 returns to a start state. If transceiver 22 receives a GPS location request signal as detected at processing segment 50, the microprocessor 23 queries the GPS receiver 24 at

segment 51. Transceiver 22 then transmits the GPS location information at segment 52 and returns to a start state.

FIGS. 4 and 5 (Appendices E and F) illustrate in flowchart form a modification of how a device position display can operate. In this modification, instead of querying the nearby electronic devices 20 regularly to obtain the location of the nearby electronic devices 20, the nearby electronic devices transmit their location when entering a pico-net. The difference between FIG. 4 and FIG. 2 is the addition of processing segment 41 and segment 42. The difference between FIG. 5 and FIG. 3 is that segment 50 is changed to segment 60 so that the GPS coordinates will be transmitted when a pico-net is joined instead of when a GPS location request signal is received.

As illustrated in FIG. 4, when the input device 15 is not deactivated as detected at processing segment 38, microprocessor 13 checks if a GPS signal is received at processing segment 41. If a GPS signal is received as detected at processing segment 41, microprocessor 13 stores the information from the GPS signal in information storage device 16 at segment 42 and returns to processing segment 41 to check if additional GPS signals were received. If a GPS signal is not received as detected at processing segment 41, microprocessor 13 returns to segment 35 to adjust the display 14 to include any additional devices. (See specification, pp. 7-8)

In order to standardize the system for various products from different manufacturers, a protocol must be established. One such protocol is known as Bluetooth.TM.. Bluetooth.TM. is a radio frequency standard that describes how portable electronic devices, such as, for example, wireless telephones, PDAs, and personal computers, can easily interconnect with each other and with home and business phones and computers using a short-range wireless

connection. The Bluetooth.TM. specification ensures that diverse devices supporting the Bluetooth.TM. technology can communicate with each other worldwide. The Bluetooth.TM. protocol allows for the automatic connections between the devices without any user intervention. Thus, when Bluetooth.TM. equipped devices come within range of one another, such as, for example, when an electronic device 10 is within range of other electronic devices 20, the devices can communicate with each other via a radio frequency.

While the Bluetooth.TM. protocol can be used with the present invention, the communications do not have to be by the Bluetooth.TM. protocol, and other standardized or proprietary protocols may also be used. Although the invention has been described with reference to using GPS coordinates to determine each electronic device's location, this is not required and an electronic device can use triangulation to determine the other electronic devices' location relative to itself. (See specification, pp. 8-9)

VIII. **GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL:**

Appellants seek the Board's review and reversal of the rejections of claims 3-5, 19 and 30-37 based on 35 U.S.C. §103(a)

IX. **ARGUMENTS:**

A.) **The Claims are Patentable Over the Combination of Bork and Fumarolo**

In the Final Office Action, the Examiner repeated his rejection of claims 3-5, 19 and 30-37 under 35 U.S.C. §103(a) as being unpatentable over Fumarolo et al., U.S. Patent No. 6,204,844 ("Fumarolo") in view of Bork et al., U.S. Patent No. 6,246,376 ("Bork"). Appellants disagree and respectfully request that the Board reverse the decision(s) of the Examiner for at least the following reasons.

Each of the claims of the present invention includes the features of: (a) the transmission of a first Bluetooth signal; (b) the detection of a plurality of second Bluetooth signals, each containing GPS coordinates of at least one nearby device; and (c) the selection of a nearby device associated with one of the detected signals to communicate with based on the received GPS coordinates.

As the Appellants presently understand the §103 rejections, the Examiner is relying on Fumarolo for all the features of the claims except the disclosure of a Bluetooth signal. The Examiner relies on Bork for the disclosure of a Bluetooth signal.

Appellants note, however, that Fumarolo does not disclose features (a)-(c) set forth above. For example, though the Examiner states that Fumarolo "clearly shows the selection of a device to communicate with" (see page 3 of the Final Office Action, line 6), Appellants disagree. Fumarolo does not select any particular device to communicate with. Instead, Fumarolo discloses the grouping of devices into "talk groups". Said another way, the selection in Fumarolo is not of a nearby device, but of a talk group. Fumarolo's talk groups do not equate to, and are not suggestive of, the claimed nearby devices of the present invention.

In addition, Fumaralo makes a selection in order to group communication units together so that they may communicate with one another in the future in order "to handle an incident (e.g., accident) displayed on [an associated] map" (see Fumarolo column 14, lines 5-10). Thus, the selection of a talk group in Fumarolo is based on whether the communication units in the group desire to handle an incident, regardless of their location, GPS coordinates or whether they are nearby. Fumarolo's use of GPS information is to locate the device, not to select a nearby device to communicate with.

Bork does nothing to make up for the deficiencies of Fumarolo.

Accordingly, Appellants respectfully submit that the subject matter of claims 3-5, 19 and 30-37 would not have been obvious to one of ordinary skill in the art at the time the application was filed upon reading the combination of Fumarolo and Bork.

Appellants respectfully request that the members of the Board reverse the decision of the Examiner, withdraw the rejections and allow claims 3-5, 19 and 30-37.

B.) The Combination of Fumarolo and Bork is Improper

In the Final Office Action (and substantively repeated in the Advisory Action), the Examiner takes the position that the combination of Fumarolo and Bork is proper because: (1) "one of ordinary skill in the art at the time the Applicants invention working through Fumarolo's system would clearly have had knowledge of Bork's system since Bork's system is a similar communications network that also utilizes a mobile communication unit to provide an indication of a location of a second unit"; and (2) "since GPS data concerning other devices can be sent to a communication unit in Funarolo's system, one of ordinary skill in the art would have thought it obvious to use alternative's methods of transferring GPS data to a communication unit such as via Bluetooth as presented by Bork". Appellants respectfully disagree.

One of ordinary skill in the art would realize that the particular Bluetooth based system in Bork could not be used in the system of Fumarolo because such a Bluetooth system would most likely not have the distance or range needed to carry out the principle of operation of Fumarolo.

Accordingly, Appellants respectfully submit that the combination of Fumarolo and Bork is improper for these reasons and for the reasons set forth in the Applicants' previous responses.

X. <u>CONCLUSION:</u>

Appellants respectfully request that the members of the Board reverse the Examiner's rejection of claims 3-5, 19 and 30-37 and allow these claims.

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-3777 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.
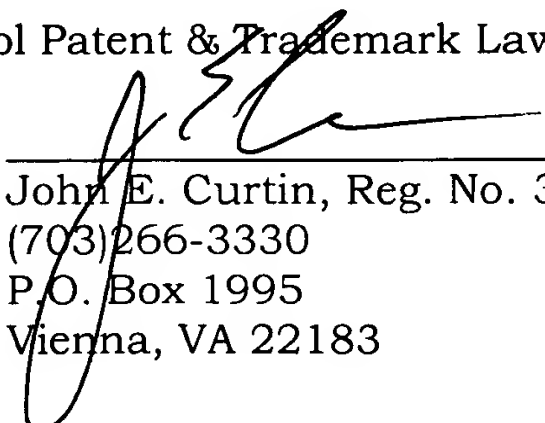
XI. <u>EVIDENCE APPENDIX</u>

None.

XII. <u>RELATED PROCEEDINGS APPENDIX</u>

None.

Respectfully submitted,

Capitol Patent & Trademark Law Firm, PLLC

By: _____

John E. Curtin, Reg. No. 37,602
(703) 266-3330
P.O. Box 1995
Vienna, VA 22183

JEC:

APPENDIX A
CLAIMS APPENDIX

1. (Cancelled)

2. (Cancelled)

3. (Previously Presented) The method as in claim 30 further comprising displaying only those nearby devices within a certain.

4. (Previously Presented) The method as in claim 19, wherein each of said second signals includes the type of nearby device.

5. (Previously Presented) The method as in claim 4 further comprising the step of displaying the type of nearby device associated with each received second signal.

6.-18. (Cancelled)

19. (Previously Presented) A method for selecting nearby devices to communicate with, comprising the steps of:

transmitting a first Bluetooth signal;

detecting a plurality of second Bluetooth signals, each containing GPS coordinates of at least one nearby device; and

selecting a nearby device associated with one of the detected signals to communicate with based on the received GPS coordinates.

20.-29. (Cancelled)

30. (Previously Presented) The method as in claim 19 further comprising the step of:

displaying the location of each nearby device associated with received GPS coordinates; and

selecting the nearby device to communicate with based on the displayed locations.

31. (Previously Presented) The method as in claim 30 further comprising selecting a nearby device associated with a shortest location.

32. (Previously Presented) A device for selecting nearby devices to communicate with operable to:

transmit a first Bluetooth signal;

detect a plurality of second Bluetooth signals, each containing GPS coordinates of at least one nearby device; and

selecting a nearby device associated with one of the detected signals to communicate with based on the received GPS coordinates.

33. (Previously Presented) The device as in claim 32 further operable to:

display the location of each nearby device associated with received GPS coordinates; and

select the nearby device to communicate with based on the displayed locations.

34. (Previously Presented) The device as in claim 33 further operable to select a nearby device associated with a shortest location.

35.   (Previously Presented)   The device as in claim 33 further operable to display only those nearby devices within a certain range.

36.   (Previously Presented)   The device as in claim 32, wherein each of said second signals includes the type of nearby device.

37.   (Previously Presented)   The device as in claim 36 further operable to display the type of each nearby device associated with each received second signal.